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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,403	08/14/2001	Konstantinos Poulakis	42014	8307

7590

10/27/2004

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EXAMINER
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EASHOO, MARK

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/913,403

Applicant(s)

POULAKIS, KONSTANTINOS

Examiner

Mark Eashoo, Ph.D.

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-29 is/are pending in the application.
- 4a) Of the above claim(s) 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Applicant's continued traverse of the restriction requirement is not found persuasive because an apparatus is not limited by the materials that it uses during operation but rather the physical structure of the apparatus itself. Therefore, applicant's allegation that a single inventive concept is present is incorrect.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claim 29 drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10-28 are rejected under 35 USC 103(a) as being unpatentable over Chesley et al. (US Pat. 6,579,162) in view of Tamura et al. (US Pat. 5,281,373).

Regarding claims 10, 11, and 8: Chesley et al. teaches the basic claimed method of making a hook/cling fastener product, comprising: a radiation-crosslinkable molding material (8:47-9:33); compression molding between rolls to form a number of interlocking means and a base(8:47-9:33); and radiation curing of the molding material (8:47-9:33).

Chesley et al. does not specifically teach use of prepolymers. It is noted that the term prepolymers is readily understood in the art of molding thermosetting polymers essentially as low to medium molecular weight, multi-functional, flowable/viscous, and polymerizable resins. Prepolymers of various compositions, for example acrylates, epoxys, and ureathanes are well known in the art of molding thermosetting polymers. Nonetheless, Tamura et al. teaches the use of various UV-curable prepolymer

resins (5:17-39). Tamura et al. and Chesley et al. are combinable because they are concerned with a similar technical difficulty, namely, continuous production of an indefinite length article using photo-curing of thermosetting resins. At the time of invention a person of ordinary skill in the art would have found it obvious to have used a prepolymer molding material, as taught by Tamura et al., in the process of Chesley et al., and would have been motivated to do so in order to provide a flowable material with an appropriate viscosity that would not run out of the rotating mold roll before it is cured.

Regarding claim 12: Chesley et al. teaches acrylic/acrylate resins (9:10-12).

Regarding claims 13-19: Tamura et al. teaches urethane acrylate prepolymer resins (eg. 2-ethylhexyl acrylate, hydroxyethyl acrylate, 1,6-hexanediol diacrylate) (5:17-39) and would have been combined with Chesley et al. for the same reasons set forth above. It is noted that the reactive species used to make the prepolymers would inherently be present in residual amounts within the prepolymers and would function as reactive diluents.

Regarding claim 20: Chesley et al. teaches electron beam curing (9:5-13).

Regarding claim 21-22: Chesley et al. teaches curing with UV radiation (9:5-13). Although not specifically claimed, it would have been inherent to have used an initiator in the molding resin to aid in curing. If it would not have been inherent, then it would have been obvious to have used an initiator in the molding resin of Chesley et al. to aid in curing, as commonly, practiced in the art, in order to quickly start the curing process.

Regarding claim 23-24 and 26-27: Chesley et al. does not teach specific photoinitiators. Nonetheless, various photoinitiators are well known in the art and commercially available (eg. Darocur 1173 from Ciba Geigy). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a commercially available photoinitiator such as Darocur 1173 from Ciba Geigy, in the process of Chesley et al., and would have been motivated to do so in order to use a photoinitiator with known initiation properties and reaction rates. Tamura et al. teaches urethane acrylate prepolymer resins (eg. 2-ethylhexyl acrylate, hydroxyethyl acrylate, 1,6-hexanediol diacrylate) (5:17-39) and various photoinitiators such as benzoyldimethylketal and would have been combined with Chesley et al. for the same reasons set forth above.

It is noted that the above mentioned "appropriate viscosity" would have been determined through routine experimentation and optimization procedures commonly practiced in the art (ie. claims 26-27).

Regarding claims 25 and 28: Chesley et al. teaches a shaping roll having cavities thereon and backing rolls (8:25-9:33), which are inherent of some of the process cited by Chesley et al. (see Figs. 5-7, Chesley et al., US Pat. 5,785,784 for examples of calendar coating, curtain coating, and extrusion coating).

### ***Response to Arguments***

Applicant's arguments with respect to claims 10-28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Eashoo, Ph.D.  
Primary Examiner  
Art Unit 1732

2004-10-25  
me

25/10/04